Application No.: 10/511,831 MTS-3542US

Amendment Dated:

July 23, 2009

Reply to Office Action of: April 28, 2009

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An AutoREC signal multiplex apparatus comprising:

video signal generation means of generating a video signal;

<u>indication means of indicating a recording start frame and a recording stop</u>
<u>frame of said generated video signal;</u>

video signal recording means of recording said generated video signal, continuous frames of which are contained in a cut from said recording start frame to said recording stop frame;

indication means of indicating a start and/or a stop of a recording performed by said video signal recording means;

AutoREC signal generation means of generating an AutoREC signal, which has recording marks to be multiplexed with <u>said continuous</u> frames <u>contained in said cut</u> where said recording is continued, in conjunction with the start and/or the stop of said recording based on respective indications; and

AutoREC signal multiplex means of multiplexing said generated AutoREC signal with said generated video signal,

wherein said video signal recording means records said video signal with which said generated AutoREC signal has been multiplexed, and

said recording mark has a value which changes alternately for every frame so that <u>video-AutoREC</u> signal <u>reproduction detection</u> means <u>detects</u>, <u>which receives when</u> the <u>recorded said recorded</u> video signal <u>is reproduced</u>, <u>detects</u> an indication that reproduction of said recorded video signal is stopped.

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2. (Original) The AutoREC signal multiplex apparatus according to claim 1, wherein said AutoREC signal multiplex means multiplexes said generated AutoREC signal with said generated video signal at the timing of said indication.

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- 3. (Original) The AutoREC signal multiplex apparatus according to claim 1, wherein said AutoREC signal is multiplexed with a LTC (Longitudinal Time Code) user's bit or a VITC (Vertical Interval Time Code) user's bit of a frame of said video signal.
- 4. (Original) The AutoREC signal multiplex apparatus according to claim 1, wherein said AutoREC signal has a start mark to be multiplexed with a frame where said recording is started, and a stop mark to be multiplexed with a frame where said recording is stopped.
- 5. (Original) The AutoREC signal multiplex apparatus according to claim 4, wherein said AutoREC signal multiplex means multiplexes said start marks with a predetermined number of frames after the frame where said recording is started.
- 6. (Original) The AutoREC signal multiplex apparatus according to claim 4, wherein said AutoREC signal multiplex means multiplexes said stop marks with a predetermined number of frames before the frame where said recording is stopped.
 - 7. (Cancelled)
 - 8. (Currently Amended) An AutoREC signal multiplex method comprising:

a video signal generation step of generating a video signal;

an indication step of indicating a recording start frame and a recording stop frame of said generated video signal;

a video signal recording step of recording said generated video signal, continuous frames of which are contained in a cut from said recording start frame to said recording stop frame;

an indication step of indicating a start and/or a stop of a recording performed in said video signal recording step;

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an AutoREC signal generation step of generating an AutoREC signal, which has recording marks to be multiplexed with <u>said continuous</u> frames <u>contained in said cut</u> where said recording is continued, in conjunction with the start and/or the stop of said recording based on respective indications; and

an AutoREC signal multiplex step of multiplexing said generated AutoREC signal with said generated video signal,

wherein said video signal with which said generated AutoREC signal has been multiplexed is recorded, and

said recording mark has a value which changes alternately for every frame so that a videoan AutoREC signal detection reproduction—step detects, which receives when said recorded video signal is reproduced, detects—an indication that reproduction of said recorded video signal is stopped.

9. (Currently Amended) A computer-readable recording medium of recording a program, which program causes a computer to act as the video signal generation step of generating a video signal, to act as the video signal recording step of recording said generated video signal, continuous frames of which are contained in a cut from said recording start frame to said recording stop frame, to act as the AutoREC signal generation step of generating an AutoREC signal, which has recording marks to be multiplexed with said continuous frames contained in said cutwhere said recording is continued, in conjunction with the start and/or the stop of said recording based on respective indications, and to act as the AutoREC signal multiplex step of multiplexing said generated AutoREC signal with said generated video signal, in the AutoREC signal multiplex method of claim 8.

10. (Cancelled)

11. (Currently Amended) A video signal division apparatus comprising:

video signal reproduction means of reproducing a recorded video signal that has been generated, continuous frames of which are contained in a cut from an indicated recording start frame of said generated video signal to an indicated recording stop frame of said generated video signal, with which an AutoREC signal is

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multiplexed, said AutoREC signal having been generated in conjunction with a start and/or a stop of a performed recording based on respective indications of the start and/or the stop of said recording and having recording marks multiplexed with said continuous frames where said recording is continued contained in said cut;

AutoREC signal detection means of detecting said AutoREC signal which is multiplexed with said reproduced video signal, and

video signal division means of dividing said reproduced video signal based on a result of said detection,

wherein said recording mark has a value which changes alternately for every frame so that said video-AutoREC signal reproduction detection means detects, which receives when said recorded video signal is reproduced, detects an indication that reproduction of said recorded video signal is stopped.

- 12. (Previously Presented) The video signal division apparatus according to claim 11, wherein said AutoREC signal has a start mark to be multiplexed with a frame where said recording is started, and a stop mark to be multiplexed with a frame where said recording is stopped.
- 13. (Previously Presented) The video signal division apparatus according to claim 12, wherein said video signal division means once divides said generated video signal when said AutoREC signal detection means continuously detects said start marks without detecting said stop marks.
 - 14. (Cancelled)
- 15. (Previously Presented) The video signal division apparatus according to claim 11, wherein said video signal division means once divides said generated video signal when said AutoREC signal detection means stops detecting said recording marks.
 - 16. (Cancelled)
 - 17. (Previously Presented) The video signal division apparatus according to

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claim 11, wherein said video signal division means once divides said generated video signal when said AutoREC signal detection means continuously detects said recording marks having the same value.

18. (Previously Presented) The video signal division apparatus according to claim 11, wherein said generated AutoREC signal is multiplexed again with said divided video signal.

19. (Previously Presented) The video signal division apparatus according to claim 11, wherein a predetermined pre-roll video signal is inserted just before said divided video signal.

20. (Currently Amended) A video signal division method comprising:

a video signal reproduction step of reproducing a recorded video signal that has been generated, continuous frames of which are contained in a cut from an indicated recording start frame of said generated video signal to an indicated recording stop frame of said generated video signal, with which an AutoREC signal is multiplexed, said AutoREC signal having been generated in conjunction with a start and/or a stop of a performed recording based on respective indications of the start and/or the stop of said recording and having recording marks multiplexed with said continuous frames contained in said cutwhere said recording is continued;

an AutoREC signal detection step of detecting said AutoREC signal which is multiplexed with said reproduced video signal, and

a video signal division step of dividing said reproduced video signal based on a result of said detection,

wherein said recording mark has a value which changes alternately for every frame so that said video AutoREC signal reproduction detection step detects, which receives when said recorded video signal is reproduced, detects an indication that reproduction of said recorded video signal is stopped.

21. (Currently Amended) A computer-readable recording medium of recording a program, which program causes a computer to act as the video signal

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reproduction step of reproducing a recorded video signal that has been generated, continuous frames of which are contained in a cut from an indicated recording start frame of said generated video signal to an indicated recording stop frame of said generated video signal, with which an AutoREC signal is multiplexed, said AutoREC signal having been generated in conjunction with a start and/or a stop of a performed recording based on respective indications of the start and/or the stop of said recording and having recording marks multiplexed with said continuous frames where said recording is continued contained in said cut, to act as the AutoREC signal detection step of detecting said AutoREC signal which is multiplexed with said reproduced video signal, and to act as the video signal division step of dividing said reproduced video signal based on a result of said detection, in the video signal division method of claim 20.

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22. (Cancelled)

23. (Currently Amended) A video system, comprising:

an AutoREC signal multiplex apparatus, having video signal generation means of generating a video signal, indication means of indicating a recording start frame and a recording stop frame of said generated video signal, video signal recording means of recording said generated video signal, continuous frames of which are contained in a cut from said recording start frame to said recording stop frame, indication means of indicating a start and/or a stop of a recording performed by said video signal recording means, AutoREC signal generation means of generating an AutoREC signal, which has recording marks to be multiplexed with said continuous frames contained in said cutwhere said recording is continued, in conjunction with the start and/or the stop of said recording based on respective indications, and AutoREC signal multiplex means of multiplexing said generated AutoREC signal with said generated video signal, said video signal recording means recording said video signal with which said generated AutoREC signal has been multiplexed; and

a video signal division apparatus, having video signal reproduction means of reproducing said recorded video signal with which said generated AutoREC signal is multiplexed, AutoREC signal detection means of detecting said AutoREC signal which is multiplexed with said reproduced video signal, and video signal division means of Application No.:

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dividing said reproduced video signal based on a result of said detection,

wherein said recording mark has a value which changes alternately for every frame so that said video AutoREC signal reproduction detection means detects, when which receives said recorded video signal detects is reproduced, an indication that reproduction of said recorded video signal is stopped.

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